

Notice of Allowability

Application No.

10/743,129

Examiner

Dang T. Nguyen

Applicant(s)

HAYASHI, KATSUHIKO

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 23 December 2003.
2. ☒ The allowed claim(s) is/are 1-44.
3. ☒ The drawings filed on 12 October 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892),
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/12/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☒ Other Search history.


ANH PHUNG
PRIMARY EXAMINER

DETAILED ACTION

1. This action is responsive to the following communications: the Application file on December 23, 2003 and the Information Disclosure Statement filed on October 12, 2004.
2. Claims 1 – 44 are pending in this case. Claims 1, 2, and 23 are independent claims.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Allowable Subject Matter

4. Claims 1 - 44 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claims 1 and 2, in addition to other elements in the respective claims, the prior art of record fails to teach or suggest "a magnetoresistive element comprising magnetoresistive element portions are electrically connected in series and a sensing circuit supply portion that flows from one end of the series connection body to the other end such that the magnetoresistance of the effective areas can be detected a change and the current also penetrate perpendicular to the laminate layer; and each of the switching elements switches on/off between one end to the other end of series connection of the magnetoresistive effect element which is connected in parallel with the switching element, in accordance with a signal inputted into a control input portion of said switching element"

With respect to claim 23, in addition to other elements in the respective claims, the prior art of record fails to teach or suggest "a magnetoresistive element comprising magnetoresistive element portions are electrically connected in series and a sensing circuit supply portion that flows from one end of the series connection body to the other end such that the magnetoresistance of the effective areas can be detected a change and the current also penetrate perpendicular to the laminate layer"

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lenssen (Patent No.: US 6,215,301 B1) discloses a layer structure bounded by two substantially parallel main faces, the layer structure having a zone which is parallel to the main faces, in which zone a current directing means is present for producing, during current passage, a current component directed transversely to the layer structure.

Koch et al. (Patent No.: 6,005,800) discloses a nonvolatile magnetic random access memory (MRAM) is an array of memory cells formed on intersections of word lines and sense lines, each memory cell having two magnetic layers separated by a conductive.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

7. Any inquiry concerning this communication from the examiner should be directed to Dang Nguyen, who can be reached by telephone at (571) 272-1955. Normal contact times are M-F, 8:00 AM - 4:30 PM.


Upon an unsuccessful attempt to contact the examiner, the examiner's supervisor, Richard Elms, may be reached at (571) 272-1869.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is (703)

305-3900. The faxed phone number for organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the Status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.

Dang Nguyen 4/15/2005


ANH PHUNG
PRIMARY EXAMINER